McIDAS-Lite

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Overview

- Space Science & Engineering Center
- McIDAS
- McIDAS-Lite

SSEC: Data

- National archive for GOES data
- Real-time, global geostationary & polar satellite database
- World-wide ancillary meteorological data
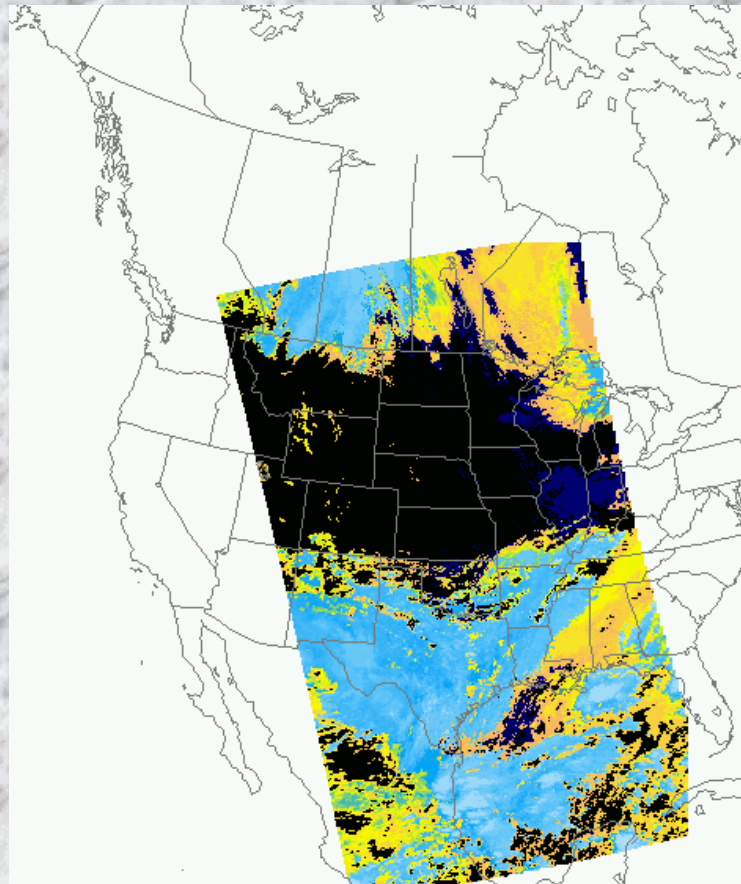- Direct ingest capability

SSEC: Software

- McIDAS
- Vis5D
- VisAD
- IAPP
- IMAPP

IMAPP

- **MODIS portion of the International MODIS/AIRS Processing Package (IMAPP)**

- **Funded by NASA**

- **Software to turn direct broadcast MODIS and eventually AIRS data into science products. The current suite of MODIS products consists of:**
  - **Calibrated, navigated 36 channel radiances (L1B)**
  - **Cloud Mask (MOD35)**
  - **Cloud Top Properties (MOD06)**
  - **Cloud Phase (MOD06)**
  - **Atmospheric Profiles (MOD07)**
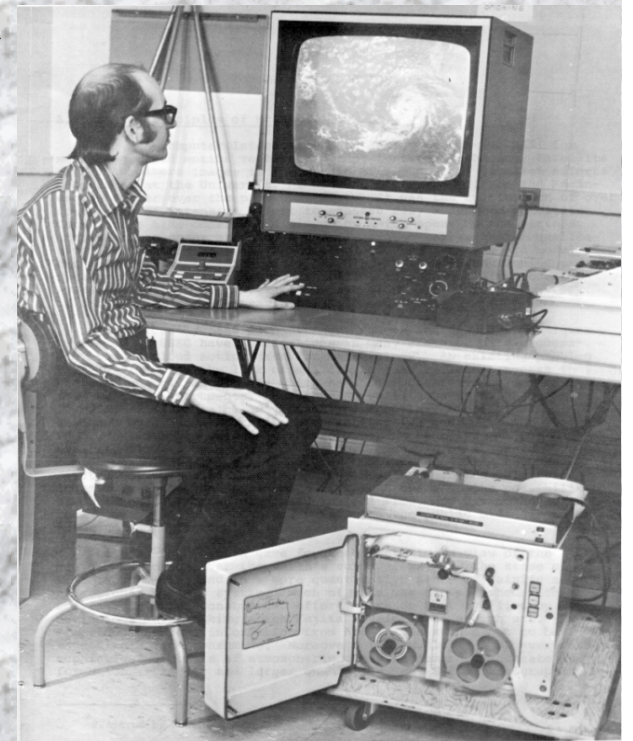- **Software is freely distributed.**
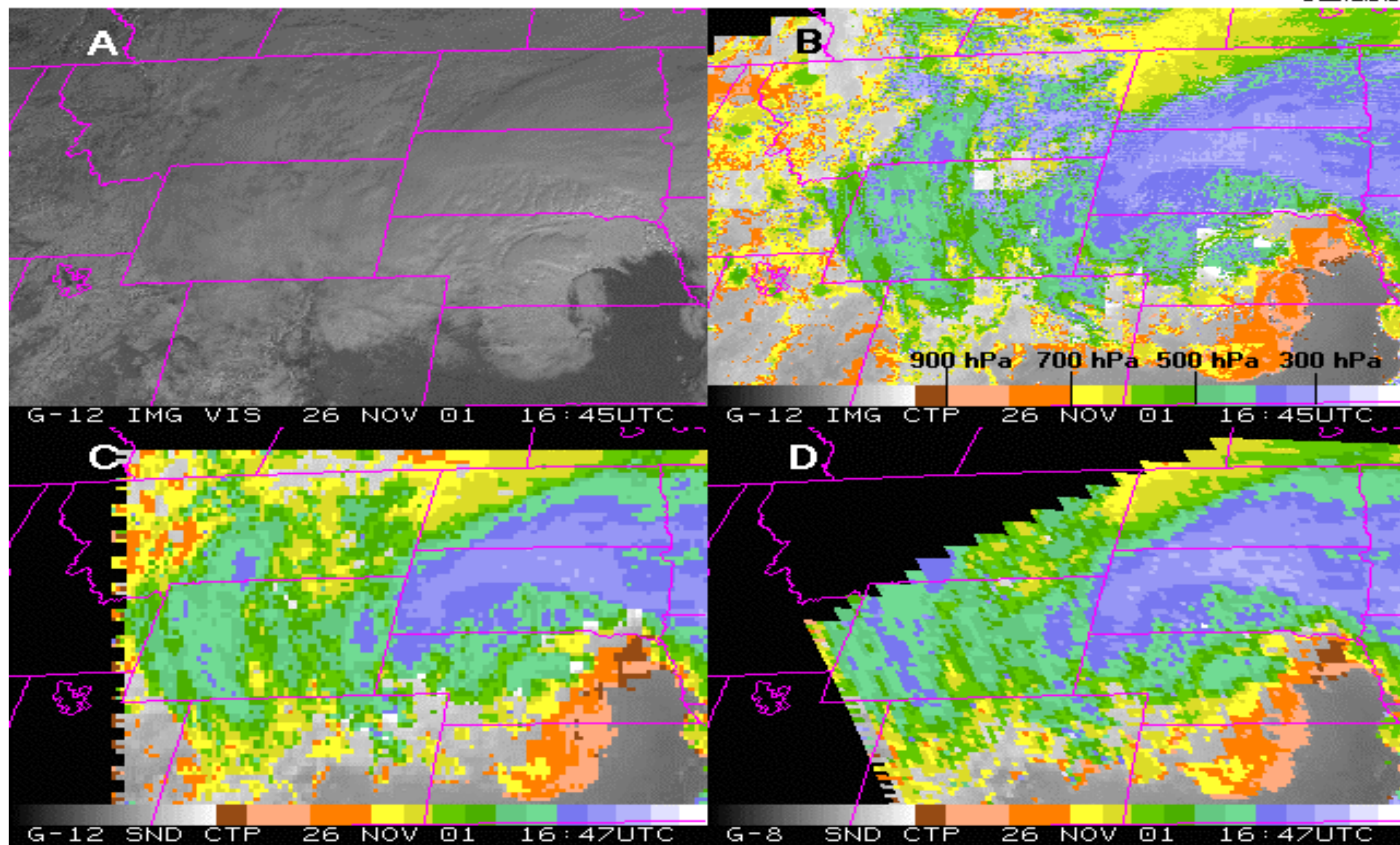
Cloud Top Pressure

Low   Mid   High

McIDAS

- <u>M</u>an <u>c</u>omputer <u>D</u>ata <u>A</u>ccess <u>S</u>ystem
- First released in 1973
- Developed to track clouds
- Ported through 4 generations of computers
- Integrates many types of meteorological data
- Used world-wide

GOES Derived Cloud Top Pressure

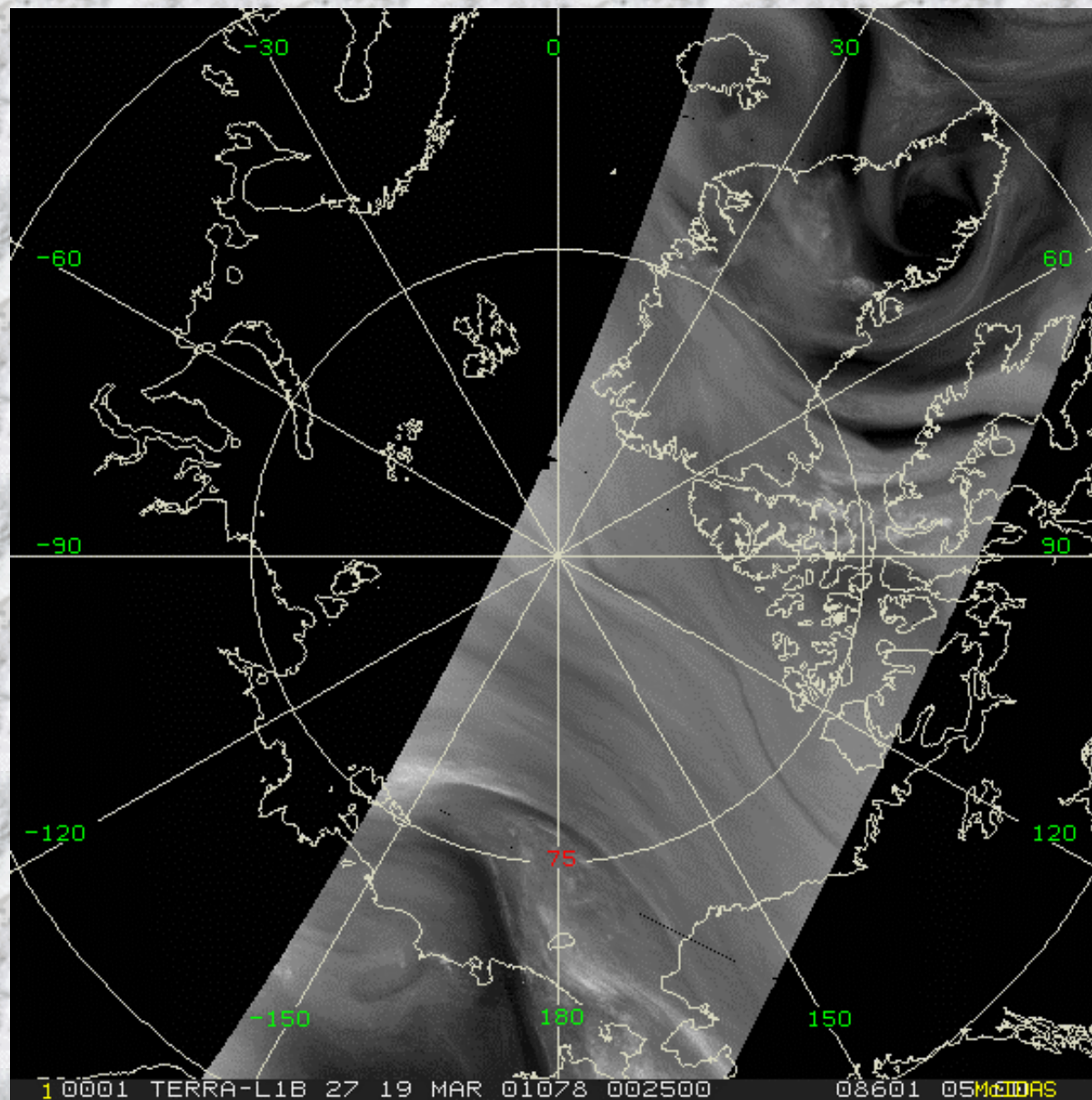Three independently derived Cloud Top Pressure images from GOES
A. GOES-12 Imager Visible
B. GOES-12 Imager CTP
C. GOES-12 Sounder CTP
D. GOES-8 Sounder CTP
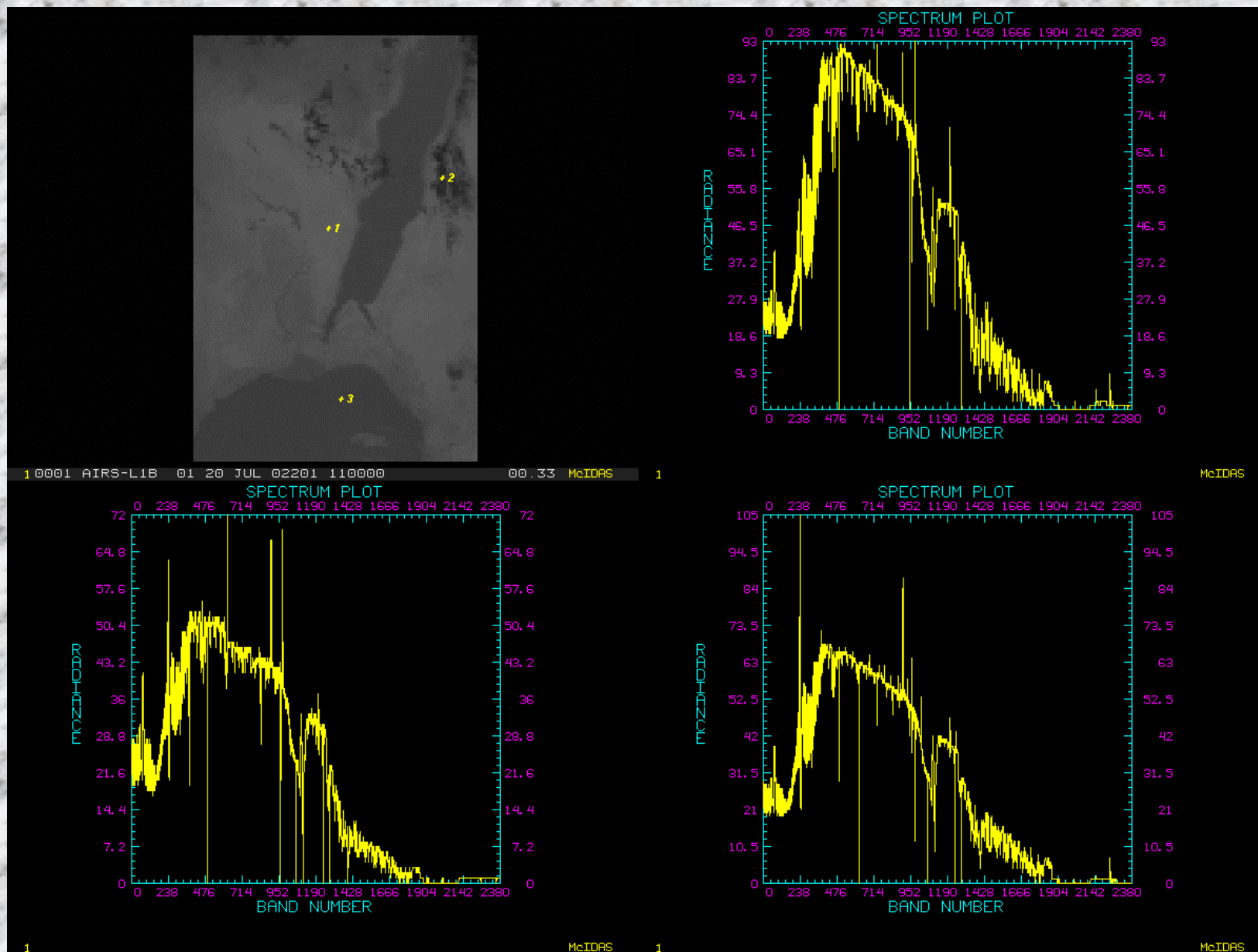
One Day of Arctic Orbits

MODIS band 27 (6.7 μm)

AIRS Data

McIDAS-Lite

- Functionality subset of McIDAS-X
- Browse local or remote data
- Input data formats
  - McIDAS image file
  - MODIS HDF files
    - Level 1b
    - Level 2 products

McIDAS-Lite

- Output data format
  - Graphical [GIF, JPEG]
  - Flat files
  - netCDF
- Geolocate data
- Calculate physical quantities
- Basic analysis functions
- Basic image color enhancement

McIDAS-Lite

- Client/server system
- Local data
- Remote data
  - ADDE [Abstract Data Distribution Environment]
  - TCP/IP
  - Subsecting and sampling
  - Compression

McIDAS-Lite Status

- First release: January 2002
  - Used in satellite meteorology class
  - 200 downloads this summer
- 1300 data requests over last 3 months
- Version 1.2 released in September 2002

McIDAS-Lite Platforms

- Unix workstations:
  - AIX, Solaris, IRIX, HPUX
- PCs:
  - Solaris, Redhat Linux, Windows/SFU
  - MacOS X?

Web Links

- Main SSEC page
  - **www.ssec.wisc.edu**
- McIDAS-Lite
  - **www.ssec.wisc.edu/mclite**
- IMAPP
  - **cimss.ssec.wisc.edu/~gumley/IMAPP**
- McIDAS
  - **www.ssec.wisc.edu/mug**
- Data Center
  - **www.ssec.wisc.edu/datacenter**